

**METHOD OF FLUID DELIVERY AND
CATHETERS FOR USE WITH SAME**

Abstract of the Disclosure

5 A pain management system for the infusion of drug to a wound site includes a
pump connected to medical tubing which is connected to an improved infusion catheter for
providing uniform delivery of fluid throughout an anatomical region. The infusion
catheter is inserted into the body of a patient at a pierce site, spaced from an incision site,
and extended to the wound site. The pump causes the drug to flow through the medical
tubing, through the infusion catheter and to the wound site. One method by which the
10 infusion catheter is advanced to the wound site includes a guide needle that is placed
within an introducer tubing. The needle is pierced through the patient's skin, after which
the guide needle is withdrawn and discarded, leaving the introducer tubing in place
partially under the patient's skin. The infusion catheter is then threaded through the
introducer tubing and advanced to the wound site. The introducer tubing is then
15 withdrawn and the infusion catheter remains in place to provide drug to the wound site.
The introducer tubing is preferably peeled off of the infusion catheter and discarded. In
accordance with one embodiment of the catheter, the catheter comprises an elongated tube
with a plurality of exit holes along an infusion section of the catheter, and an elongated
flexible porous member residing within the tube and forming an annular space between the
20 tube and the member. In accordance with other embodiments, the catheter includes a tube
having a plurality of exit holes in a side wall of the tube. The exit holes may combine to
form a flow-restricting orifice of the catheter. Advantageously, fluid within the catheter
flows through all of the exit holes, resulting in uniform distribution of fluid within an
anatomical region.

25